

REMARKS

Reconsideration is requested.

Claims 1-4, 10, 12-17, 19-23, 29, 44-47, 49-51 and 53-56 are pending.

The claims have been amended, without prejudice, to obviate at least the objections to claims 4, 10, 12-17, 19-23 and 53-56, the Section 112, second paragraph, rejection of claims 1-4, 10, 12-17, 19-23, 29, 44, 45, 47 and 49-51, and the Section 112, first paragraph "written description", rejection of claims 1-4, 10, 12-17, 19-23, 29, 44, 45, 47 and 49-51. No new matter has been added. The Examiner's helpful suggestions are noted with appreciation. The claims are submitted to be definite and adequately supported by the specification. The applicants submit that one of ordinary skill will appreciate from the specification that the applicants were in possession of the claimed invention at the time the application was filed.

The applicants note that page 14 of the specification describes, for example, how to identify orthologous sequences; a description of specific orthologues then follows. On page 15 the specification describes, for example, of the application as filed, a description of specific paralogues then follows. Further homologous sequences are also provided on pages 15 and 16 of the application as filed. A representative number of sequences is described.

With regard to the Examiner's comments regarding essential amino acids of the amino acid motifs, the applicants note that SEQ ID NOs: 5, 51, 7, 8 and 9 describe highly conserved sequences which are described, for example, in detail from pages 10 to 14 of the application as filed. The highly conserved nature of these sequences

suggests that their presence is necessary for performance. The description also explains the nature of some of the residues, e.g. whether they are hydrophobic or hydrophilic. This information would, for example, guide a person of ordinary skill in the art to be able to substitute one hydrophobic residue for another without compromising on function.

Withdrawal of the claim objections, the Section 112, second paragraph, rejection and the Section 112, first paragraph "written description", rejection is requested.

The Section 112, first paragraph "enablement", rejection of claims 1-4, 10, 12-17, 19-23, 29, 44-47, 49-51 and 53-56 is obviated by the above amendments. The claims define transforming a plant, which is supported by an enabling disclosure. Moreover, as noted above, the sequences of the claims are highly conserved in zinc finger proteins throughout species and therefore would be necessary for function. The description also provides guidance directed to one of ordinary skill regarding the nature of the residues. The Examiner is urged to appreciate that the claims define the use of the recited sequences to achieve certain yield-enhancing traits in plants. The zinc finger sequences useful in the methods of the invention are taught extensively throughout the application as filed and are well within the understanding of one of ordinary skill in the art.

The Section 102 rejection of claims 1-4, 10, 12-17, 19-23, 29, 44-47, 49, 51 and 53-56 over Gasser (U.S. Patent No. 5,859,337), is traversed. The Section 103 rejection of claims 1-4, 10, 12-17, 19-23, 29, 44-47, 49-51 and 53-56 over Gasser is traversed.

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Reconsideration and withdrawal of the rejections are requested in view of the above and the following distinguishing comments.

The claimed method for increasing yield under conditions promoting plant growth is not literally or inherently described by the cited art. The applicants submit that the conditions of salt-stress, for example, taught by Gasser would not be regarded by one of ordinary skill in the art as growth promoting. The claims are not anticipated by Gasser.

Furthermore, the applicants submit that the claimed invention would not have been obvious in view of Gasser. There are examples of genes which exert a protection effect under stress conditions, but which would not under normal (non-stress) conditions. Such genes may give rise to an improvement in plant survival under stress conditions, but would not show any effect under non-stress conditions. Performance of a gene under stress or non-stress conditions is unpredictable. It was therefore surprising to find that the zinc finger sequences were useful in achieving certain yield-enhancing effects in plants grown under growth promoting conditions. The claimed invention would not have been obvious over Gasser.

Withdrawal of the Section 102 and Section 103 rejections is requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned, preferably by telephone, in the event anything further is required.

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Respectfully submitted,

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